

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A waveform monitoring apparatus, comprising:
 - a hydraulic cylinder, incorporated in an injection molding device for ejecting a molding material;
 - a sensor, generating pressure data of the hydraulic cylinder;
 - a ~~determinant~~, forming determination device comprising:
 - a computing processor configured to:
 - form a measured value waveform based on the pressure data; [I,
 - and]]
 - determine determining whether the pressure data exceeds a reference pressure waveform by a predetermined range; and
 - a marking applier, applying a marking to an excess portion of
 - apply an error signal to the measured value waveform having an excess portion in which the pressure data exceeds the reference pressure waveform by
 - the predetermined range determined by the determinant; and
 - a display for displaying the measured value waveform having the excess portion to which the marking is applied and a marking at the excess portion of the measured value waveform to which the error signal is applied,
 - wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure waveform.

2. (Canceled)

3. (Currently Amended) The waveform monitoring apparatus as set forth in claim 1, further comprising a sorter which sorts a product formed from the molding material, wherein the determinant determination device outputs a determination signal indicating whether the pressure data exceeds the reference pressure waveform by the predetermined range to the sorter.

4. (Currently Amended) The waveform monitoring apparatus as set forth in claim 1, wherein the determinant determination device stops an injecting operation of the injection molding device when the measured value waveform in which the pressure data exceeds [[a]] the reference pressure waveform by [[a]] the predetermined range is continuously detected more than a predetermined times.

5. (Currently Amended) The waveform monitoring apparatus as set forth in claim 1, wherein the determinant determination device sets [[a]] an upper limit range and a lower limit range with respect to the reference pressure waveform as the predetermined range.

6. (Currently Amended) The waveform monitoring apparatus as set forth in claim 1, further comprising a storage which stores the measured value waveform to which the error signal is applied marking is applied.

7. (Currently Amended) A method for monitoring a waveform, comprising the steps of:

generating pressure data of a hydraulic cylinder incorporated in an injection molding device for ejecting a molding material;

forming a measured value waveform based on the pressure data;

determining, using a computing processor, whether the pressure data exceeds a reference pressure waveform by a predetermined range;

applying, using the computing processor, a marking to an excess portion of an error signal to the measured value waveform having an excess portion in which the pressure data exceeds the reference pressure waveform by the predetermined range determined in the determinant step; and

displaying the measured value waveform having the excess portion to which the marking is applied and a marking at the excess portion of the measured value waveform to which the error signal is applied,

wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure waveform.

8. (Canceled)

9. (Previously Presented) The method as set forth in claim 7, further comprising the step of outputting a determination signal to a sorter which sorts a product formed from the molding material,

wherein the determination signal indicates whether the pressure data exceeds the reference pressure waveform by the predetermined range.

10. (Currently Amended) The method as set forth in claim 7, further comprising the step of stopping an injecting operation of the injection molding device when the measured value waveform in which the pressure data exceeds [[a]] the reference pressure waveform by [[a]] the predetermined range is continuously detected more than a predetermined times.

11. (Currently Amended) The method as set forth in claim 7, wherein the predetermined range is set [[a]] by an upper range and a lower range with respect to the reference pressure waveform.

12. (Currently Amended) The method as set forth in claim [[1]] 7, further comprising the step of storing the measured value waveform to which the marking is applied error signal is applied.

13. (Currently Amended) The waveform monitoring apparatus as set forth in claim 1, wherein the marking applier applies marking displayed at the excess portion is a graphical marking to the excess portion of the displayed measured value waveform determined by the determinant.

14. (Currently Amended) The method as set forth in claim 7, wherein the marking displayed at the excess portion is a graphical marking is applied to the excess portion of the displayed measured value waveform determined in the determinant step.